



Certificate of Calibration

Transducer Model: PDI Transducer

Pile Dynamics, Inc.

Serial Number: I990

PDI Gage Factor: 95.2 me/V

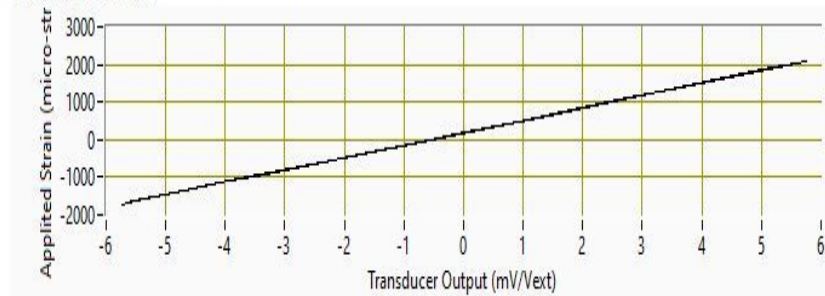
General Gage Factor: 330.7 me/mV_{ext.}

Initial Offset Voltage: -0.142 mV/V_{ext.}

Table 1: Representative Calibration Data

Applied Strain (micro-strain)	Transducer Output (mV/V _{ext.})	Applied Strain (micro-strain)	Transducer Output (mV/V _{ext.})
44.791	-0.426	319.316	0.426
-108.551	-0.896	601.742	1.282
-384.386	-1.740	904.993	2.197
-632.415	-2.503	1217.140	3.131
-897.938	-3.315	1533.395	4.067
-1156.925	-4.104	1852.935	5.005
-1405.926	-4.854	2109.383	5.748
-1641.856	-5.548	2059.026	5.602
-1705.880	-5.731	1730.721	4.628
-1618.463	-5.489	1410.671	3.665
-1346.458	-4.674	1098.430	2.736
-1057.675	-3.788	796.517	1.815
-766.308	-2.902	497.041	0.911
-488.594	-2.040	198.071	0.011
-213.863	-1.197	49.588	-0.432
56.563	-0.369	47.029	-0.431

Calibration Curve



Mean Linear Correlation Coefficient (LCC): 0.999977

LCC Standard Deviation: 1.420590E-6

Calibrated By: DJC

Signature: _____

Date and Time: 7/7/2020 9:05 AM

Temperature (Degrees C): 25.5

Specifications

PDI Automated Strain Transducer Calibration System (PDI - ASTCS)

ASTCS Serial Number:	PDI CAL 2015-02
ASTCS Software Version Number:	3.001
ASTCS Independent Verification Date:	9/22/2015 1:48 PM
Transducer Gage Length:	3 inches (76.2 mm)
Full Scale Displacement Range:	+/- 0.0075 (inches)
Method for Applying Displacement:	Precision Stepper Motor Connected to Linear Stage
Excitation Voltage for Calibration:	2.5 VDC
Displacement Measurements:	Dual Precision LVDTs, Output Averaged
Displacement Certification:	NIST 274437-07
Linearity Verification Technique:	Linear Correlation Coefficient < 0.9996
Repeatability Verification Technique	Standard Deviation < 0.5% of mean

ASTCS System Check

Reference Strain Transducer:	B5580
Reference General Gage Factor:	529.70 micro-strain/mV/V
LVDT #1 Sensitivity (inches/volt):	0.0079
LVDT #2 Sensitivity (inches/volt):	0.0081
System Temperature Status	Passed
Date/Time of Last System Check	9/22/2015 1:48 PM

PDI Strain Transducer Connections

Black	Excitation +
Green:	Excitation -
Red:	Signal +
White	Signal -
Grey/BARE	Shield

NIST Reference:

PDI certifies the above PDI-ASTCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique. The calibration of this instrument was performed in accordance with the PDI Quality Assurance program. Measurements and information provided on this report are valid at the time of calibration only.